

Title (en)

POLYSILOXANE URETHANE COMPOUNDS AND OPTICALLY TRANSPARENT ADHESIVE COMPOSITIONS

Title (de)

POLYSILOXANURETHANVERBINDUNGEN UND OPTISCH TRANSPARENTE KLEBSTOFFZUSAMMENSETZUNGEN

Title (fr)

COMPOSÉS D'URÉTHANE ET DE POLYSILOXANE ET COMPOSITIONS ADHÉSIVES OPTIQUEMENT TRANSPARENTES

Publication

EP 3717585 A1 20201007 (EN)

Application

EP 18880610 A 20181127

Priority

- US 201762590794 P 20171127
- US 2018062596 W 20181127

Abstract (en)

[origin: WO2019104317A1] Disclosed is a terminally functionalized polysiloxane urethane polymer comprising: polysiloxane segments comprising from 50 to 98% by weight based on the total polymer weight; urethane segments comprising from 2 to 50% by weight based on the total polymer weight; and terminal functional groups selected from (meth)acrylate functional groups, isocyanate functional groups and mixtures thereof. The terminally functionalized polysiloxane urethane polymer finds use in liquid optically clear adhesive formulations wherein it can provide dual photo and moisture cure properties. In some embodiments cured reaction products of the liquid optically clear adhesive composition prepared with the terminally functionalized polysiloxane urethane polymer exhibit low haze of 2% or less and low yellowness b* values of 2 or less as prepared and after aging testing. In some embodiments cured reaction products of the liquid optically clear adhesive composition prepared with the terminally functionalized polysiloxane urethane polymer exhibit minimal shrinkage.

IPC 8 full level

C09J 183/04 (2006.01); **C08G 18/10** (2006.01); **C08G 18/61** (2006.01); **C08G 77/38** (2006.01); **C08L 83/04** (2006.01); **C09J 175/04** (2006.01);
C09J 175/16 (2006.01)

CPC (source: EP KR US)

C08G 18/10 (2013.01 - EP KR); **C08G 18/246** (2013.01 - EP KR); **C08G 18/282** (2013.01 - KR); **C08G 18/307** (2013.01 - KR);
C08G 18/61 (2013.01 - EP KR); **C08G 18/672** (2013.01 - KR); **C08G 18/6795** (2013.01 - EP KR); **C08G 18/73** (2013.01 - EP KR);
C08G 18/755 (2013.01 - EP KR); **C08G 18/758** (2013.01 - EP KR); **C08G 77/38** (2013.01 - EP US); **C08G 77/388** (2013.01 - EP KR);
C08G 77/458 (2013.01 - EP KR); **C08K 5/0025** (2013.01 - EP KR); **C08K 5/16** (2013.01 - EP KR); **C08L 83/04** (2013.01 - KR);
C08L 83/10 (2013.01 - KR); **C09J 175/04** (2013.01 - EP KR); **C09J 175/16** (2013.01 - EP KR); **C09J 183/04** (2013.01 - KR US);
C09J 183/10 (2013.01 - EP KR); **C08G 2170/00** (2013.01 - US); **C09J 2433/00** (2013.01 - US); **C09J 2483/00** (2013.01 - US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2019104317 A1 20190531; CA 3082910 A1 20190531; CN 111386325 A 20200707; EP 3717585 A1 20201007; EP 3717585 A4 20210908;
JP 2021504524 A 20210215; KR 20200084016 A 20200709; MX 2020005255 A 20200824; US 2020277444 A1 20200903

DOCDB simple family (application)

US 2018062596 W 20181127; CA 3082910 A 20181127; CN 201880075995 A 20181127; EP 18880610 A 20181127;
JP 2020528881 A 20181127; KR 20207015780 A 20181127; MX 2020005255 A 20181127; US 202015929728 A 20200519